

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (ORIGINAL) An system for transaction settlement with an electronic cashing card having a non-authentication processing memory and an authentication processing memory, said system comprising:

means for updating an authentication balance stored in a balance area of the authentication processing memory and a non-authentication balance stored in a balance area of the non-authentication processing memory, said means updating the authentication balance to a balance amount after settlement when a transaction is settled by an authentication process having a requirement for a personal authentication to be matched, said means updating the non-authentication balance to an amount less than or equal to the stored authentication balance when the transaction is settled by the authentication process; and

means for comparing the non-authentication balance and the authentication balance and determining that an illegal process has been performed with the card when the non-authentication balance is larger than the authentication balance.

2. (ORIGINAL) The system recited in claim 1, wherein:

when a transaction is settled by a non-authentication process wherein the personal authentication is not required to be matched, the balance amount after settlement is calculated based on the stored authentication balance and the non-authentication balance is updated to the balance amount after settlement; and

when a transaction is settled by the authentication process, the balance amount after settlement is calculated based on the stored non-authentication balance and both the authentication balance and the non-authentication balance are updated to the balance amount after settlement.

3. (ORIGINAL) The system recited in claim 1, wherein:

when the transaction is settled by a non-authentication process wherein the personal authentication is not required to be matched, the balance amount after settlement is calculated based on the stored non-authentication balance and the non-authentication balance is updated to the balance amount after settlement; and

when a transaction is settled by the authentication process, the balance amount after settlement is calculated based on the stored authentication balance and the stored non-authentication balance, the authentication balance is updated to the balance amount after settlement, and the non-authentication balance is updated according to a preset condition amount.

4. (ORIGINAL) The system recited in claim 1, wherein the authentication balance and the non-authentication balance are compared in each of successive transactions to be settled by a non-authentication process wherein the personal authentication is not required to be matched, when a count of the successive transactions completed is less than or equal to a predetermined number.

5. (ORIGINAL) The system recited in claim 1, wherein:
a settlement amount limit is set for settlement of transactions by a non-authentication process wherein the personal authentication is not required to be matched; and
said comparing and determining means determines that an illegal process has been performed with the card when a disbursement amount, to be written in the non-authentication processing memory as a disbursement history, exceeds the settlement amount limit.

6. (ORIGINAL) The system recited in claim 1, wherein when the authentication process is invoked to perform a deposit or to settle a transaction, a money amount is deposited for the authentication process and is written to a predetermined area of the non-authentication processing memory, the money amount comprising at least one of a predetermined cash amount and a predetermined rate amount.

7. (ORIGINAL) The system recited in claim 1, further comprising within the card:
arithmetic means for executing arithmetic calculations for the authentication process and a non-authentication process wherein the personal authentication is not required to be matched, said arithmetic means further controlling data reading and writing operations from and to the non-authentication processing memory and the authentication processing memory; and
input/output means for executing data input/output operations between the arithmetic means and an external unit.

8. (ORIGINAL) The system recited in claim 1, wherein the card comprises an integrated circuit.

9. (ORIGINAL) The system recited in claim 1, wherein the card is a prepaid card.

10. (ORIGINAL) A method of transaction settlement with an electronic cashing card having a non-authentication processing memory and an authentication processing memory, the method comprising:

updating an authentication balance stored in the authentication processing memory and a non-authentication balance stored in the non-authentication processing memory, the authentication balance being updated to a balance amount after settlement when a transaction is settled by an authentication process having a requirement for a personal authentication to be matched, the non-authentication balance being updated to an amount less than or equal to the stored authentication balance when the transaction is settled by the authentication process; and

determining that an illegal process has been performed with the card when a comparison of the non-authentication balance and the authentication balance indicates that the non-authentication balance is larger than the authentication balance.

11. (ORIGINAL) The method recited in claim 10, wherein:

when a transaction is settled by a non-authentication process wherein the personal authentication is not required to be matched, the balance amount after settlement is calculated based on the stored authentication balance and the non-authentication balance is updated to the balance amount after settlement; and

when a transaction is settled by the authentication process, the balance amount after settlement is calculated based on the stored non-authentication balance and both the authentication balance and the non-authentication balance are updated to the balance amount after settlement.

12. (ORIGINAL) The method recited in claim 10, wherein:

when the transaction is settled by a non-authentication process wherein the personal authentication is not required to be matched, the balance amount after settlement is calculated based on the stored non-authentication balance and the non-authentication balance is updated to the balance amount after settlement; and

when a transaction is settled by the authentication process, the balance amount after settlement is calculated based on the stored authentication balance and the stored non-authentication balance, the authentication balance is updated to the balance amount after settlement, and the authentication balance is updated to a preset condition amount.

13. (ORIGINAL) The method recited in claim 10, wherein the authentication balance and the non-authentication balance are compared in each of successive transactions to be settled by a non-authentication process wherein the personal authentication is not required to be matched, when a count of the successive transactions completed is less than or equal to a predetermined number.

14. (ORIGINAL) The method recited in claim 10, further comprising determining that an illegal process has been performed with the card when a settlement amount limit is less than a disbursement amount to be written in the non-authentication processing memory as a disbursement history, the settlement amount limit being set for settlement of transactions by a non-authentication process wherein the personal authentication is not required to be matched.

15. (ORIGINAL) The method recited in claim 10, wherein when the authentication process is invoked to perform a deposit or to settle a transaction, a money amount is deposited for the authentication process and is written to a predetermined area of the non-authentication processing memory, the money amount comprising at least one of a predetermined cash amount and a predetermined rate amount.

16. (ORIGINAL) The method recited in claim 10, further comprising:
executing within the card arithmetic calculations for the authentication process and a non-authentication process wherein the personal authentication is not required to be matched;
controlling within the card data reading and writing operations from and to the non-authentication processing memory and the authentication processing memory; and
executing within the card data input/output operations between the card and an external unit.

17. (ORIGINAL) A computer readable medium encoded with a program for settlement of transactions with an electronic cashing card having a non-authentication processing memory and an authentication processing memory, said program comprising procedures for:

updating an authentication balance stored in the authentication processing memory and a non-authentication balance stored in the non-authentication processing memory, the authentication balance being updated to a balance amount after settlement when a transaction is settled by an authentication process having a requirement for a personal authentication to be matched, the non-authentication balance being updated to an amount less than or equal to the stored authentication balance when the transaction is settled by the authentication process; and

determining that an illegal process has been performed with the card when a comparison of the

non-authentication balance and the authentication balance indicates that the non-authentication balance is larger than the authentication balance.

18. (ORIGINAL) The computer readable medium recited in claim 17, wherein:

when a transaction is settled by a non-authentication process wherein the personal authentication is not required to be matched, the balance amount after settlement is calculated based on the stored authentication balance and the non-authentication balance is updated to the balance amount after settlement; and

when a transaction is settled by the authentication process, the balance amount after settlement is calculated based on the stored non-authentication balance and both the authentication balance and the non-authentication balance are updated to the balance amount after settlement.

19. (ORIGINAL) The computer readable medium recited in claim 17, wherein:

when the transaction is settled by a non-authentication process wherein the personal authentication is not required to be matched, the balance amount after settlement is calculated based on the stored non-authentication balance and the non-authentication balance is updated to the balance amount after settlement; and

when a transaction is settled by the authentication process, the balance amount after settlement is calculated based on the stored authentication balance and the stored non-authentication balance, the authentication balance is updated to the balance amount after settlement, and the authentication balance is updated to a preset condition amount.

20. (ORIGINAL) The computer readable medium recited in claim 17, wherein the authentication balance and the non-authentication balance are compared in each of successive transactions to be settled by a non-authentication process wherein the personal authentication is not required to be matched, when a count of the successive transactions is less than or equal to a predetermined number.

21. (ORIGINAL) The computer readable medium recited in claim 17, wherein said program further comprises a procedure for determining that an illegal process has been performed with the card when a settlement amount limit is less than a disbursement amount to be written in the non-authentication processing memory as a disbursement history, the settlement amount limit being set for settlement of transactions by a non-authentication process wherein the personal authentication is not required to be matched.

22. (ORIGINAL) The computer readable medium recited in claim 17, wherein said program further comprises procedures for depositing a money amount for the authentication process and writing the money amount to a predetermined area of the non-authentication processing memory when the authentication process is invoked to perform a deposit or to settle a transaction, the money amount comprising at least one of a predetermined cash amount and a predetermined rate amount.

23. (ORIGINAL) The computer readable medium recited in claim 17, wherein said program further comprises procedures for:

executing within the card arithmetic calculations for the authentication process and a non-authentication process wherein the personal authentication is not required to be matched;

controlling within the card data reading and writing operations from and to the non-authentication processing memory and the authentication processing memory; and

executing within the card data input/output operations between the card and an external unit.

24. (ORIGINAL) A transaction settlement system comprising a transaction terminal and an electronic transaction card readable by said transaction terminal, wherein:

said card includes memory storing an authentication balance and a non-authentication balance, the authentication balance for transaction settlement by an authentication process requiring a personal authentication to be matched and the non-authentication balance for transaction settlement by a non-authentication process wherein the personal authentication is not required to be matched; and

said system further comprises a control unit controlling updates to the authentication balance and the non-authentication balance and detecting that an illegal process has been performed with said card when a comparison indicates the non-authentication balance is greater than the authentication balance.

25. (ORIGINAL) The system recited in claim 24, wherein said system further comprises a comparison unit comparing the stored authentication balance and the stored non-authentication balance when a transaction is to be settled with said card.

26. (ORIGINAL) The system recited in claim 24, wherein an authentication processing memory and a non-authentication processing memory are included in said memory, the authentication processing memory storing the authentication balance and the non-authentication memory storing the

non-authentication balance.

27. (ORIGINAL) The system recited in claim 24, wherein a money processing memory storing both the authentication balance and the non-authentication balance is included in the memory.

28. (ORIGINAL) The system recited in claim 24, wherein said card further includes an input/output interface for transferring data between said card and a device external thereto.

29. (ORIGINAL) The system recited in claim 25, wherein said system further comprises an arithmetic unit for performing arithmetic calculations for the authentication process and the non-authentication process.

30. (ORIGINAL) The system recited in claim 24, wherein said system further comprises a synchronization unit executing a synchronization process after a deposit has been performed by the authentication process, the synchronization process including updating a non-authentication disbursement history in the memory based on the authentication balance after the deposit.

31. (ORIGINAL) The system recited in claim 24, wherein said card further includes a read/write controller updating the authentication balance and the non-authentication balance under control of the control unit.

32. (ORIGINAL) The system recited in claim 24, wherein said control unit is included in said card.

33. (ORIGINAL) The system recited in claim 25, wherein said comparison unit is included in said card.

34. (ORIGINAL) The system recited in claim 29, wherein said arithmetic unit is included in said card.

35. (ORIGINAL) The system recited in claim 30, wherein said synchronization unit is included in said card.

36. (NEW) A transaction settlement method, comprising:
updating a non-authentication balance that is stored on a card to an amount less than or

Ball equal to an authentication balance that is stored on the card; and

determining that an illegal process has been performed with the card when the non-authentication balance is larger than the authentication balance.
